### Business Challenge

Masaryk Memorial Cancer Institute (MMCI) is the Czech Republic’s leading oncology treatment institution. Founded in 1935 in Brno, the organization treats more than 200,000 cancer patients a year and has a well-earned international reputation. MMCI prides itself on being a leader in cancer research and has a team of highly qualified medical personnel.

Everything that the institute does has one objective in mind: to deliver excellent service to the patient. As well as designing healthcare services around the needs of patients, MMCI places a lot of importance on keeping relatives and loved ones informed.

The institute is a strong advocate of technology and believes that it has the potential to transform patient care, cut costs, and improve resource allocation. In the past, the Institute was unable to achieve these goals due to a dispersed IT infrastructure, isolated islands of information, and the need for multiple data entry.

### Solution and Results

A top priority for MMCI was finding a solution that could make data more widely available and better enable medical staff. After an intensive search, MMCI decided to implement a Cisco wireless solution based on the design principles of a Cisco® Medical-Grade Network (MGN).

“There were cheaper point product solutions available,” says Marek Svoboda, deputy director for development, science, and training for MMCI. “But we chose Cisco’s proposal because it provided an architectural approach and easy integration with our applications and devices.”

The MGN architecture was developed drawing upon industry best practice and Cisco experience of working with healthcare providers around the world. For MMCI, it offers a proven wireless network foundation for optimizing access to information, resources, and clinical services, anytime, anywhere, using any device.

The new wireless LAN (WLAN) is already transforming productivity and patient care. Patient information is now entered once, avoiding unnecessary duplication of data and effort. Armed with tablet PCs, medical staff can view real-time information at the point of need. “Immediate access to such information, combined with the ability to issue an electronic prescription at the bedside, saves time and means better care for patients. As a result, medical staff now spend around 15 percent less time on administrative tasks,” says Svoboda.

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Having instant access to a patient’s medical history is enabling medical staff to make faster decisions about prescribing and administering drugs. Every patient is provided with an alert tag that includes a radio frequency identification (RFID) chip. If patients need assistance, they can press a button, and a nurse will be able to locate them. The same technology can be used to find patients who may suffer from disorientating illnesses, such as dementia.

High-value assets have also been fitted with RFID tags, allowing administrators to keep track of their movements at all times. MMCI expects that in the future the solution will help to reduce theft and unauthorized use of medical equipment.

The Cisco MGN architecture puts other exciting possibilities within reach. New projects under consideration include the introduction of Cisco EnergyWise to help reduce power consumption. Plans are in place to deploy Cisco Unified Communications to improve clinical collaboration between doctors, nurses, and other medical professionals. The institute also intends to extend its WLAN to give patients access to the Internet and a selection of guest services.

For More Information
To find out more about Cisco Medical-Grade Network, please go here.
To find out more about Cisco Collaboration Solutions, please go here.